1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

phur which they bring from *Olontoſki*, where it drops from the rocks, is quite fine and pellucid; and in the *Pyrites* upon the coaſt it is to be found every where.

The following kinds of earth are common. Great quantities of white chalk are found about the *Kurilſky* lake; tripoly and oker about the Great River, and the villages of *Nachikin* and *Koutchinubiff*; and a purple-coloured earth about the hot ſprings, and ſometimes a hard ſtony oker. Among the ſtones in the mountains are found, but rarely, ſmall cherry-coloured chryſtals; and near the river *Charious* are found pieces of fluſſe, which is like a coarſe green glaſs, of which the inhabitants formerly made knives, axes, lancets, and darts. It is called by the *Ruſſian* natives glaſs, and by the *Kamtſchadales*, *nanagy*. This fluſſe is alſo found in the copper mines about *Ecatherinenbourg*, where it is called a topaz. There is likewiſe here a ſort of light ſtone, white like chalk, of which the inhabitants make plates, and lamps wherein they burn their fiſh oil; and every where upon the ſhore is found an iron-coloured hard ſtone, porous as a ſpunge, and eaſily turned by the fire.

The inhabitants find pellucid ſtones near the ſprings of the river, which they uſe inſtead of flints. Some of theſe ſtones are ſemi-pellucid, whitiſh and milky, and reckoned cornelians by the *Ruſſians*. Some ſmall pellucid ſtones of a yellowiſh colour, like corals, are found upon the banks of ſeveral rivers; and plenty of hyacinths near *Tomſkoy*.

Hitherto they have diſcovered no precious ſtones here. The hills are firmer than thoſe in *Siberia*, and do not fall away like them; but when the earth falls off they find much *lac lunæ*; and a ſoft kind of bolus, of a fattiſh creamy taſte, is found near the *Penſchinſka* ſea, *Kurilſkoy* lake, and the *Olutorſkoy*: this is uſed as an excellent remedy in fluxes. I ſent ſpecimens of moſt of the above things to the Muſeum of the Imperial Academy of *St. Peterſbourg*. I muſt not forget to mention that

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

boil it with their fiſh, and uſe the leaves as tea; but the greateſt uſe is made of its pith, which, after having ſplit the ſtalks, they ſcrape out with ſhells, and, tied up in bundles, dry it in the ſun. It is then very pleaſant, and in taſte reſembles dried *Perſian* cucumbers. The *Kamtſchadales* uſe it in ſeveral diſhes, and ſerve it up green as a deſert. The kipri boiled gives a thick ſweet wort, that makes the beſt quaſſe * imaginable: it alſo affords them a very ſtrong vinegar, if to ſix pounds of the kipri they add a pound of the ſweet herb of ſphondilium, and ferment it in the uſual way: they get a great deal more brandy, when they uſe the infuſion of the kipri, inſtead of water, to prepare the ſweet herb for diſtillation.

They cure the navels of their children with this herb, chewing it, and laying it upon the part. They grind the roots and ſtalks, and uſe them inſtead of green tea, to which the flavour has ſome reſemblance. The ſame uſe the *Kuriles* make of another ſhrub †, which has flowers like the ſtrawberry, only yellow, and produces no berries. This is called *Kurilſkoy* tea, and has great virtue in fluxes and gripes.

The wild garlick ‖ is not only uſeful in the kitchen, but alſo in medicine. Both the *Ruſſians* and *Kamtſchadales* gather great quantities, which they cut and dry in the ſun for their winter proviſion; at which time boiling it in water they ferment it a little, and uſe it as an herb ſoup, which they call *ſhami*. They eſteem the wild garlick ſo efficacious a remedy againſt the ſcurvy, that they think themſelves in no danger ſo ſoon as it begins to

* Quaſſe is a *Ruſſian* drink made of rye-malt, and flower, and very little fermented. Sometimes they add mint to it, and it makes no diſagreeable drink.

† Potentilla caule fruticoſa. LINN. Cliff.

‖ Allium foliis radicalibus petiolatis floribus umbellatis. GMEL. flor. Sib. tom. 1. p. 49.

ſhew

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

137 278 Amongſt the medicinal plants we muſt mention the following: 1ſt, Kailoun, a plant which grows in all the ſwamps near the rivers. The inhabitants uſe this as a cataplaſm in all boils to make them ſuppurate; and taken in decoctions, they imagine it produces ſweat, and drives away every infectious humour. 2dly, The tchaban *, which grows in plenty through all *Kamtſchatka*, they uſe in decoctions for all pains and ſwellings of the legs. 3dly, Katunatch †, or wild roſemary, is not ſo ſtrong as in other parts. The inhabitants have thought it beneficial in the venereal diſeaſe, but in this are deceived. 4thly, The ſea oak ‖ is thrown out by the waves; and being boiled with the ſweet herb, a decoction of it is given in fluxes. 5thly, The ſea raſberry is given to women in labour, to promote the birth. 6thly, There is yet another ſea plant, called yachanga ‡, which the ſea throws out near to the *Kuriliſkaya Lopatka*, reſembling the whale's beard. This the inhabitants uſe in cholic pains, infuſing it in cold water. 7thly, The omeg **, or water hemlock, grows upon all the rivers, and almoſt all the ſhore of 757 *Kamtſchatka*. This plant is made uſe of againſt pains in the back in the following manner:---They put the patient into a hut made exceedingly warm; and when he begins to ſweat profuſely, they rub his back with the cicuta, being careful not to touch the loins, for, what is very extraordinary, that would occaſion ſudden death: however from this practice they 137 generally obtain great relief. 8thly, The zgate †† muſt not 278 be omitted, whoſe dreadful qualities are but too well known 411 in all this part of the world. They anoint the points of their darts and arrows with the juice which is ſqueezed from the

* Dryas. LINN.
† Andromeda foliis ovatis venoſis.
‖ Quercus marina. CLUS. et LOB.
‡ Species fuci.
** Cicuta aquatica.
†† Anemonoides et ranunculus.

root

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

root of this plant, and the wounds which they give are incurable unleſs the poiſon be ſucked out. This is certainly the only method, and, if this be neglected, the wound immediately turns blue and ſwells, and in two days the patient dies. The very largeſt whales when they have received a ſlight wound from ſuch a poiſoned weapon, cannot bear the ſea for any conſiderable time; but throwing themſelves upon the ſhore, expire moſt miſerably, with terrible groans and bellowing.

The following are very ſerviceable for cloathing, and other houſehold purpoſes.

There grows upon the ſea-ſhore a whitiſh high plant, reſembling wheat. I have ſeen it at *Strelinimuiſe*, the palace below *St. Peterſbourg*, upon ſandy ground. Of this they make mats, which ſerve them as coverings and curtains; the beſt of theſe are made of different colours, with the beards of the whales ſplit very ſmall and dyed. They alſo make clokes of it, like the old *Ruſſian* milled clokes, ſmooth within, and rough without, which makes the rain run more eaſily off them. The prettieſt of this kind of work is their little bags and baſkets, in which the women keep their trinkets. Theſe are ſo neat, that one would take them to be made of ſplit canes; and they are ornamented with the hair of whales' beards and horſe-hair, dyed of different colours. When this plant is green they make large bags of it to contain their fiſh or different herbs and roots, which they provide againſt the winter: beſides it ſerves alſo to thatch their houſes or huts. They mow it with a ſcythe, made out of the ſhoulder-blade of a whale; which they whet ſo well by grinding it upon a ſtone, that they bring it to a very good edge.

In the marſhes there is found a plant reſembling the cyperoides. This they dreſs with a double-toothed comb of bone, and uſe it to wrap their children in inſtead of ſhirts or ſwaddling cloaths, to keep them clean and ſweet. They alſo roll

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

There is likewiſe another creature in theſe ſeas reſembling a whale, but ſmaller and ſlenderer: the *Ruſſians* call it a wolf, and the *Kamtſchadales*, chethak. Its fat is of ſuch a nature, that, when ſwallowed, it preſently paſſes inſenſibly. The natives ſometimes uſe it as a medicine in caſe of coſtiveneſs, but oftener to play tricks with one another. They feed upon the fleſh and tongue, which have not the ſame quality.

Notwithſtanding the great plenty of whales upon this coaſt, the ſcarcity of food is ſometimes ſo great, that whole villages die of hunger. In the month of *April*, 1739, I ſaw a melancholy inſtance of their being obliged, out of neceſſity, to eat ſome poiſonous whale's fat, at a village upon the river *Beroſover*, called *Alaune*, where I obſerved the people all look pale, as if they had been ſick for a long time; when I aſked the reaſon, I was told, that juſt before my arrival one of the natives was killed by eating of whale's fat; and as all the reſt had eat of the ſame, they dreaded the ſame fate. In about half an hour, a young healthy man began to groan and complain that his throat burnt; upon which the old women, who are the phyſicians there, faſtened him with ropes to a ladder, and placed themſelves on both ſides of him with great clubs in their hands, with which they toſſed firebrands out of the huts, and the wife of the ſick perſon coming behind him, made ſeveral conjurations over his head, begging death to ſpare him: however he died the next day; but the other inhabitants, as I heard, recovered with difficulty after a long time. This accident did not greatly ſurpriſe me; I rather wondered that ſuch things did not happen oftener, eſpecially from thoſe whales which are killed with poiſoned darts. However the *Kamtſchadales* think ſo little of the conſequences, that they had rather riſk their lives than be deprived of the pleaſure of eating whale's fat.

After the whales, we muſt mention the fiſh * mokoe, which at *Archangel* is called akula. It is about three fathoms long;

* Canis Carcharias Autoris.

brings

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

757 certain herb which they rub upon their gums, as alſo the leaves of the cranberry * and blackberry †. The Coſſacks cure themſelves with decoctions of the tops of cedar, and by eating wild garlick. The good effects of this medicine were felt by all the people that were in the *Kamtſchatka* expedition.

164 757 Boils are a moſt dangerous diſeaſe in *Kamtſchatka*, cauſing the death of numbers. They are very large, being often two and ſometimes three inches over; and when they break they open in about forty or fifty little holes. It is looked upon to be a very dangerous caſe, when no matter comes from theſe openings; and thoſe that recover are confined to their beds, ſometimes ſix and ſometimes ten weeks. The *Kamtſchadales* uſe raw hare-ſkins to bring the matter to a ſuppuration. The palſy, cancer, and *French* diſeaſe, are ſuppoſed to be incurable; the laſt, they ſay, was not heard of before the arrival of the *Ruſſians*. There is likewiſe another diſtemper which they call *ſuſhutch*, which is a ſort of ſcab, that ſurrounds the whole body under the ribs like a girdle. When this does not come to ſuppurate and fall off, then it is mortal, and, they ſay, every one muſt have this once in his lifetime, as we have the ſmall-pox. Mr. *Steller* gives a more ample account of their diſeaſes and remedies. He relates, that they uſe with ſucceſs the ſpunge for drawing out the matter in theſe boils. The Coſſacks apply to their boils the remains of the ſweet-graſs ‖ after they have extracted their brandy, and this often ſucceſsfully reſolves them.

757 244 278 The women uſe ſea raſberries ‡ to haſten their delivery; and alſo a ſort of coral, which they make into powder like crab-eyes, in a gonorrhea. Againſt coſtiveneſs they uſe the fat of the ſea wolf; in gripes, pains of the bowels, and colds, they uſe a

* Vaccinium ramis filiformibus repentibus, foliis ovatis perennantibus.
† Empetrum. ‖ Spondylium foliolis pinnatifidis. ‡ Species fuci.

decoction

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

decoction of the pentaphylladis fruticoſus, and that not without ſucceſs. To wounds they apply the bark of the cedar, and with this they pretend they can even extract arrows.

In coſtiveneſs they likewiſe drink the broth of their ſtinking fiſh, and in fluxes they eat lac lunæ, which is very common in this country. For the ſame diſtemper they likewiſe uſe meadow-ſweet and tormentilla root.

Thoſe who have ſore throats uſe a decoction of the epilobium, which is alſo uſed by women in hard labours. When they are bit by a dog, or wolf, they lay the bruiſed leaves of the ulmaria upon the wound, drinking at the ſame time a decoction of them: this decoction they alſo admininiſter in the belly-ach and ſcurvy. The leaves and ſtalks bruiſed they uſe in burns. The decoction of this herb mixed with fiſh they uſe alſo in the tooth-ach; they hold it warm in their mouths, and lay a piece of the root upon the affected tooth. They uſe a ſpecies of gentian in the ſcurvy, and almoſt againſt every diſorder. In the *French* diſeaſe they apply the chamaenchododendros, but ſeldom to any advantage: in fluxes they uſe the quercus marina: in ſwellings of the legs and ſcurvy, they drink a decoction of the dryas; and procure ſleep by eating the ſeed of the ephedra. They foment their eyes with a decoction of ſeramus.

The inhabitants of the *Lopatka* uſe clyſters, which probably they learned from the *Kuriles*: they prepare them from a decoction of different herbs, ſometimes with fat and ſometimes without: this they put into a ſeal's bladder, faſtening to it any pipe which they can procure, and apply it in the common way: this medicine is in high eſteem among them, and uſed in moſt diſtempers.

In the jaundice, they have a medicine, which they look upon as infallible. They take the roots of the iris ſylveſtris, and after cleaning them, beat them in warm water, and apply the juice, which they ſqueeze out, as a clyſter, continuing it for

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

two days three times a day: this produces a purging, and generally gives great relief. After ſome time, if the cure is not completed, they repeat it again. They neither uſe lancets nor cupping glaſſes, but with a pair of wooden pincers draw up the ſkin, and pierce it with an inſtrument of chryſtal made on purpoſe, letting out as much blood as they want.

In pains of the back they rub the part affected before a fire with a root of the cicuta, being careful not to touch the joins, which they ſay would produce ſpaſms. In pains of the joints they place upon the part a little pyramid, made of a fungus which grows upon the birch-trees, and ſet the top of it on fire, letting it burn 'till it comes to the ſkin, which then cracks, and leaves a wound behind that yields a great quantity of matter. The wound they cure with aſhes of the fungus, but ſome give themſelves no trouble about it at all. The root of the anemonides, or ranunculus, they uſe to hurt or poiſon their enemies; and they likewiſe poiſon their arrows with it.

CHAP. XIX.

Of the BURIAL *of the* DEAD.

THE burial of the dead, if one can call throwing them to the dogs a burial, is different here from what it is in any other part of the world; for inſtead of burning or laying the dead bodies in ſome hole, the *Kamtſchadales* bind a ſtrap round the neck of the corps, draw it out of the hut, and deliver it for food to their dogs: for which they give the following reaſons; that thoſe who are eaten by dogs will drive with fine dogs in the other world; and that they throw them round near

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian.

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737–1742) and G. Steller (1740–44).

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens.

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture.

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks.

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish.

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils.

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison.

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden

7:Lesseps T-3 (1787-88)1790 Kamchadal

164
278
757

The ſmall pox, whoſe ravages I have already mentioned, appears not to be natural to the country, nor is it very common. Since the invaſion of the Ruſſians, and the frequent emigrations that ſucceeded it, this epidemical diſeaſe has only made its appearance in 1767 and 1768. It was then brought into the country by a Ruſſian veſſel bound to the Eaſtern iſlands, for the purpoſe of hunting otters, foxes, and other animals. The perſon, who had in his blood the fatal germ, was a ſailor from Okotſk, where he had taken remedies for the diſorder, previous to his departure; but the recent marks of it were viſible. Scarcely landed, he communicated this cruel malady to the poor Kamtſchadales, which carried off three fourths of them. As it has not appeared ſince, it is ſuppoſed that theſe people are not ſubject to it. In the year 1790 it broke out in the northern part of Kamtſchatka, but it did not ſpread ſo far as the peninſula.

7:Lesseps T-3 (1787-88)1790 Kamchadal

164 278 757 peninſula. It began at Anadirſkoi; it is not known how it was brought there, though the Ruſſians are alſo accuſed in this inſtance.

There is reaſon to ſuſpect that the Kamtſchadales are indebted to them in like manner for their knowledge of the venereal diſeaſe, which happily is not common. This peſtilence appears to be exotic, and its cure is as difficult as it is rare. They have recourſe to various roots and to corroſive ſublimate, which is attended in this country with its uſual ruinous effects, and the more ſo, as being indiſcreetly adminiſtered.

732 The Kamtſchadales have no deformed births. Such as are deformed among them, have become ſo in conſequence of a conſiderable fall, though this is not a very common occurrence, as they are accuſtomed to fall from their balagans. They are but

7:Lesseps T-3 (1787-88)1790 Kamchadal

844 theſe occaſions they make uſe of their hair,
862 I am told, to tie the umbilical cord, carry home their children themſelves, and immediately give them ſuck. They have no limited time for ſuckling their children, and I have ſeen inſtances of its continuing for four or five years. We may judge from this circumſtance of the ſtrong conſtitution of theſe women. It is obſerved, however, that Kamtſchadales of either ſex, do not live longer than Ruſſians.

278 I forgot to mention a remedy to which
825 the inhabitants of this peninſula have voluntary recourſe in almoſt every diſeaſe: it is to a root called *bears root*, which they ſteep in brandy. The name ſufficiently indicates to whom they are indebted for its knowledge. Perceiving that the bear was fond of eating this herb, and of rolling himſelf upon it when wounded, they imagined it to poſſeſs ſome healing quality, and this

7:Lesseps T-3 (1787-88)1790 Kamchadal

278 this induced them to make uſe of it. This
825 animal thus gave them their firſt leſſon in botany and pharmacy. It is ſaid however, that the bear cures all his wounds with this root. If this be true, it is natural to ſuppoſe that human beings would find it very ſerviceable: but as I have never had occaſion to make the experiment, I can only ſpeak from report.

177 The Chriſtian religion was introduced
771 into this country by the Ruſſians; but the
793 inhabitants appear to know little more of it than the ceremony of baptiſm. They are ignorant of the very firſt principles of Chriſtianity. Slaves to their inclinations, they follow their impulſe whether good or bad. If they think of religion, it is merely from a motive of convenience or intereſt, or when particular circumſtances compel them to it. This proves how very defective their inſtruction is, and reflects in my opinion

17: Heizer--421 E-3 (no date)1943 Kamchadal-1-4
116, 225, 278

"Steller [CMC: G.W. Steller. Beschreibung von dem Lande Kamtschatka. Frankfurt and Leipzig] (1774, pp. 98, 103, ftn. (a)) has left the best description of Kamchadal whaling: (2)

2. The accounts of Asiatic whaling by Tooke[CMC: W. Tooke, View of the Russian Empire during the Reign of Catherine the Second and to the Close of the Eighteenth Century, 3 vols. Dublin] (1801, vol. 3, pp.18-20) and Krashenninikov[CMC: S. P. Krashenninikov. The History of Kamtschatka and the Kurilski Islands, with the countries adjacent, James Grieve. Gloucester](1764, pp. 138-139) are similar to Steller's fuller description, which I offer here in translation from the German edition.

Whales are also taken in the neighborhood of Kamtschatka in the number of ways which I shall cite here, however inconceivable such seem and are astonishing in view of(the size of) these great sea animals. Around Lapatka (3) and the

3. Cape Lopatka, the southernmost tip of the Kamchatka Peninsula.

Kurile Islands the inhabitants travel into the sea in baidars, (4) seek places at

4. This word ordinarily refers to skin-covered boats; here it means wooden boats with dugout hulls and built-up side planks (cf. Torii, [CMC: R. Torii. Les Ainous des Iles Kouriles. Journ. Coll. Sci. Tokyo Imperial University, vol. 42] 1919, pp. 178-183).

which these are accustomed to sleep; as many animals as they meet, so many do they shoot with poisoned arrows, whereby they suddenly puff out (become animated?) storm and rage frightfully and go (down) into (sound) the sea, and it happens now and then, that one or more, at times even none of them, are cast upon the shore. When the Kuriles obrain a whale, (5) no one begins to cut it up until all are

5. Presumably this refers to the moment when the whale, previously attacked, has come ashore as already described by Steller.

assembled; first shamanizing takes place, each one puts on his best clothes, and carries home his portion, after this one yurt entertains the other. Before and after the entertainment they give their dance, and otherwise delight themselves in all sorts

of ways, which will be treated in what follows.

As soon as a whale comes to the land in Kamchatka, they fasten it with a thin line to a little stick stuck in the sand, and believe certainly on this account, that neither the spirits nor the sea nor Gamuti, or spirits of the land, can any longer have any claim to it.

Further descriptions of the Kamchadal whale fishery are passing references, (6) or

6. Steller, 1774, pp. 100, 103, ftn (a); Krashenninikov, 1764, p. 141. Von Langsdorff [CMC: G.H. von Langsdorff, Voyages and Travels in Various parts of the World, during the years 1803...1807, London] (1813, p. 262) and Petroff [CMC: Ivan Petroff. Report on the Population, Industries and Resources of Alaska. U.S. Department of the Interior, Bureau of the Census](1884, p. 146) deny Kamchadal whaling. By Von Langsdorff's time the practice may have been forgotten.

are seemingly traceable to Steller's original account.

Whaling in the Kurile Islands between Yezo and the Kamchatka peninsula is recorded, but not described adequately. Krashenninikov says (1764, p. 138; see also Steller,

1774, p. 98) the 'Kuriles (kill whales) by throwing poison darts into them.' The same author (7) notes that the southern Kurilians (i.e., Ainu) feed on whale'fat. Shelekhoff

7. Krashenninikov, 1764, p. 39. La Pérouse, [CMC: J.F.G. de La Pérouse. A Voyage round the World, performed in the years 1785, 1786, 1787, 1788 by the Boussole and Astrolabe, 2 vols. London] 1799, pp. 59-60, 75. Drift whales cast ashore on Etorup are mentioned in Neue Beschreibung, [CMC: Neue Beschreibing der Kurilischen Inseln, in P.S. Pallas, Neue Nordische Beytrage, vol. II, St. Petersburg and Leipzig] 1782 p. 134.

[CMC: G. Shelekhoff. Voyages of G. Shelekhoff, from the Year 1783 to 1790, St. Petersburg. MS translation by Ivan Petroff in Bancroft Library, University of California, Berkeley](1812, vol. 1, p. 128) states that the Japenese receive whale oil from the Matmai Kuriltze. (8)

8. The Kurile Islands, except the two northernmost opposite Cape Lopatka, were occupied by Ainu. These two northern islands, Paramushir and Shumshiri, were inhabited by Kamchadal. There are a few slight indications that others of the Kurile Islands may have been occupied by Kanchadal, or, at any rate, strongly culturally influenced from Kamchatka."

17: Heizer--445 E-3 (no date) 1943 Kamchadal-1-2
116, 225, 278

"Steller (1774, pp. 235-236, ftn.a) says of the southern Kamchadal, [CMC: The following quote from Steller given in German in the text: 'Nonetheless such were very much feared because they (i.e. the Kamchadal) poisoned them by gluing on powder from the root of the Napelli (Aconitum napellus?) which in Russian is called Ludik.]Shelekhoff (75) says, ' Paramushir Island has a plant called Liutik, with the roots of which the na-

75. Shelekhoff, 1812, vol.1, p. 90. Neue Beschreibung...1782, p. 118. Paramushir was occupied by Kamchadal. In fact, at least the two northernmost islands of the Kurile chain (Paramushir and Sumshiri), and perhaps still others, were not held by Ainu, but by Kamchadal. This implies Ainu-Kamchadal contacts and probable cultural interchange. We know, for example, they both hunted whales in the same manner.

tives paint themselves and into its juice they dip the points of their arrows, to kill animals.'Krashenninikov's statement (1764, p. 42) about 'poisonous herbs, whose roots are as yellow as saffron and as thick as rhubarb, and are well known to the inhabitants of the first Kurilskoy island...' may refer to the same plant. Lewin(76)identified the

76. Lewin, [CMC: L. Lewin. Die Pfeilgifte. Leipzig.] 1923, pp. 174-175.

'zgate' spoken of by Krashenninikov (77) as Anemone ranunculoides. Thus, there seems

77. Krashenninikov, 1764, pp. 92-93.

to be not a single clear reference to aconite poison from Kamchatka, but of Anemone. There can be little doubt but that this poison extracted from roots is related to the high development in the area to the south and southeast."